

	Friday 14-May-2021 Pre-course basics	Monday 17-May-2021 Intro to Project Finance	Tuesday 18-May-2021 Debt and Equity	Wednesday 19-May-2021 Debt & risk	Thursday 20-May-2021 Renewable energy & grid issues	Friday 21-May-2021 Power Purchase Agreements
Videos can be watched at any time but before the scheduled live sessions						
Preparation	<p>Videos</p> <p>0.12 Intro to debt and equity (6 min)</p> <p>0.13 Benefits of leverage (3 min)</p> <p>0.14 Present value math (18 min)</p> <p>0.15 NPV Function (5 min)</p> <p>0.16 IRR (8 min)</p> <p>3.3. WACC (14 min)</p> <p>(Excel functions videos: 14 min)</p> <p>(Best practice videos: 30 min)</p> <p>Reading:</p> <p>IPPs in SSA article (Eberhard et al, 2017)</p>	<p>Videos</p> <p>1.1 What is project finance (7 min)</p> <p>1.2 Investment structure (8 min)</p> <p>1.4 Role of parties and cashflow (14 min)</p> <p>1.5 Risk allocation (8 min)</p> <p>1.6. Total cashflow (3 min)</p> <p>Reading:</p> <p>Principles of project finance (Yescombe, Ch2)</p> <p>Project Finance book of jargon (Latham & Watkins)</p>	<p>Videos</p> <p>3.1. Refresh on impact of leverage (10 min)</p> <p>3.2. Impact of leverage extended (20 min)</p> <p>3.5. How lenders set interest rates and DSCR (10 min)</p> <p>3.9. Linear, mortgage style and DSCR sculpted (10 min)</p> <p>3.24. Sources of debt (11 min)</p> <p>Exercise:</p> <p>Summarise term sheet</p>	<p>Videos</p> <p>3.26. Types of credit facilities (5 min)</p> <p>3.27. Recitals and definitions (7 min)</p> <p>3.28. Reps and warranties (9 min)</p> <p>3.29. Conditions precedent (3 min)</p> <p>3.30. Covenants (4 min)</p> <p>3.31. The waterfall (4 min)</p> <p>3.32. Events of default and remedies (5 min)</p> <p>3.33. Amendments, waivers, consents (2 min)</p> <p>Credit ratings</p> <p>Reading:</p> <p>Fitch: RE project rating criteria</p> <p>Moodys Rating Methodology: Power projects</p>	<p>Videos</p> <p>4.1. Capacity vs. energy (1 min)</p> <p>4.2. Capacity factors (3 min)</p> <p>4.5. Wind forecasting (24 min)</p> <p>4.6. P-factors and long-terms vs. 1-year distribution (11 min)</p> <p>4.7. Probabilistic analysis and normal distribution functions in excel (17 min)</p> <p>Reading:</p> <p>Independent Engineers Reports (OE & LE)</p>	<p>Videos</p> <p>5.1. PPA overview (13 min)</p> <p>5.2. PPA risk (6 min)</p> <p>5.3. PPA legal (6 min)</p> <p>5.4. Capacity payments (7 min)</p> <p>Reading:</p> <p>Wind PPA (REI4P)</p>
Live Online Sessions						
11h00-12h00	Test Run	<p>Wikus Kruger</p> <p>Welcome</p> <p>Course Overview</p> <p>Learning approach</p>	Debt term sheet exercise feedback	Tutor session: Questions, clarifications	<p>Live Exercise:</p> <p>Financial model</p> <p>Impact of RE resource/capacity factors on LCOE/PPA price</p>	Tutor session: Questions, clarifications
12h00-12h30		<p>Anton Eberhard</p> <p>Power sector investment trends</p>	<p>Alastair Campbell & Daniel Gross</p> <p>Debt capital markets</p> <p>Debt pricing (cost of capital)</p>	<p>Daniel Gross</p> <p>Credit rating agencies</p>	<p>Bernard Magoro</p> <p>Key issues in grid interface contracts</p>	<p>Daniel Gross & Jay Govender</p> <p>Power Purchase Agreement</p>
12h40-13h10		<p>Daniel Gross</p> <p>Recap of introduction to project finance</p>	<p>Lisa Pinsley & Daniel Gross</p> <p>Equity</p> <p>CAPM</p>	<p>Daniel Gross</p> <p>Interest rate & currency swaps</p>	<p>Emmanuel Namanya</p> <p>Role of IE</p> <p>Owners vs Lenders IE</p>	<p>Daniel Gross & Jay Govender</p> <p>Power Purchase Agreement (cont.)</p>
13h20-14h30		<p>Live Exercise:</p> <p>Intro to the financial model</p>	<p>Live Exercise:</p> <p>Financial model</p> <p>Impact of cost of debt and equity on LCOE/ PPA price</p>	<p>Live Exercise:</p> <p>Financial model</p> <p>Impact of credit ratings downgrades on LCOE/ PPA price</p> <p>Impact of local vs foreign currency on LCOE/PPA price</p>	BREAK	<p>Daniel Gross/(Wikus Kruger)</p> <p>Best practices for reading and summarising legal documents</p>

Monday 24-May-2021 Offtake agreements	Tuesday 25-May-2021 Costs: construction, operation	Wednesday 26-May-2021 Risk mitigation	Thursday 27-May-2021 Auctions Social & economic development	Friday 28-May-2021 Recap
Videos can be watched at any time but before the scheduled live sessions				
<p>Videos: Collateral/security package Implementation Agreements Off-grid investment trends & features (Ben Attia)</p> <p>Exercise: Creating a PPA term sheet (REI4P PPA)</p> <p>Optional: SAPVIA Contracts and Agreements webinar</p> <p>Reading: Implementation Agreement (REI4P) Direct Agreement (REI4P)</p>	<p>Videos 6.1. Operating costs (6 min) 11.1. EPC contract (36 min) 12.1. Depreciation (20 min)</p> <p>Reading: Connecting the dots - the case for transmission PPPs in Africa</p> <p>Optional: SAPVIA EPC webinar</p>	<p>Videos SAPVIA project development webinar (135 min) Africa GreenCo (Cathy Oxby)</p> <p>Reading : Government guarantees for mobilising private finance in infrastructure (PPIAF) World Bank guarantees products matrix World Bank group guarantee products</p>	<p>Videos Procurement (Wikus Kruger - TBD)</p> <p>Optional: SAPVIA Economic Development Impact Webinar (115 min)</p> <p>Reading: IFC Performance Standards Localisation paper (Morris et al, 2020)</p>	Revision
Live Online Sessions				
PPA Term sheet exercise feedback	Exercise feedback: Tx Project Finance Model	Tutor session: Questions, clarifications	Live exercise: procurement	Tutors: Questions, clarifications
Daniel Gross & Jay Govender Security package	Daniel Gross Taxation	Wikus Kruger & Daniel Gross Review of project risks	Stephan van den Berg Environmental, social & governance risks	Daniel Gross Recap
Daniel Gross Innovation in offtake agreements	Daniel Gross EPC & O&M	Shingira Masanzu Mitigating risk	Glen Robbins Localisation/local content	Anton Eberhard/Wikus Kruger Thanks & Farewell
Live Exercise : Financial model Impact of chancing take-or-pay clause to take-and-pay clause on LCOE/PPA price	Live Exercise : Financial model Impact of different depreciation models on LCOE/ PPA price	Live exercise: Financial model Impact of MIGA cover on LCOE/PPA price	Live Exercise: Financial model Impact of various (S)ED criteria on project LCOE/PPA price (e.g. local content, ownership, ED spend)	